### TANZANIA

# A proud partner

#### **INTERVIEW WITH DEREK HUDSON**

PRESIDENT, BG EAST AFRICA



DEREK HUDSON is a geologist by profession and has worked in the oil and gas industry for twenty five years beginning his career with Petrotrin, Trinidad's national oil company. He joined BG Group in 1995 in Trinidad where he was Exploration Manager. He then transferred to the UK becoming Vice President of BG's North Sea operations from 2000 - 2004 before returning to Trinidad as Chief of Staff and then as President and Asset General Manager. In 2012 he was appointed to his present role as President and Asset General Manager of BG East Africa with responsibility for Tanzania, Kenya and Madagascar.

Please explain the reasons behind BG Group's decision to invest in Tanzania, which since 2010 has turned into one of the company's greatest successes. Did the company expect such a string of discoveries of the scale which have been found in Tanzania?

One of the greatest challenges the gas industry faces is developing new resources to meet rising global demand for cleaner supplies of energy. Around the world, demand for natural gas is growing strongly – by around 2.5 per cent a year. The demand is there; the question is how we can develop sufficient supply. Companies including BG Group have discovered vast new resources of natural gas in waters offshore East Africa, which is well located to supply the fast-growing economies of Asia and Latin America. Our task is to develop that gas for export to markets around the world and as importantly for domestic use.

Exploration for oil and gas is an area in which, we think, we have a competitive advantage. To date, BG Group's local business, BG Tanzania, and its partners have drilled 15 successful wells in succession offshore southern Tanzania; that is a 100 per cent strike rate in an industry where 20 per cent is considered excellent. I suspect that, for as long as I work in the industry, I will never again have the good fortune to be part of such a remarkable achievement.

We must remember, though, the scope of the challenge. Oil and gas industry projects are large, technically complex and require billions of dollars of investment. We have much work to do before we can make a final decision committing us to a project, but we have made a very encouraging start. We are working hard to give Tanzania the opportunity to one day provide customers around the world with large and reliable supplies of natural gas, in the form of liquefied natural gas or LNG.

#### BG Group currently has 15 tcf of gross recoverable resources of gas in Tanzania. Is this figure likely to increase and how do you assess the future of gas resources of Tanzania?

We believe the 15tcf of gas already discovered offshore southern Tanzania is sufficient to support our domestic market obligations and an onshore LNG export facility with two production plants, known as "trains".

While there is the potential for further exploration, our focus is now on designing upstream production facilities and other infrastructure to efficiently produce the resource. Recently we announced excellent results from a test well on the Mzia discovery in Block 1, which supported the work we are doing to develop an offshore gas hub to supply a potential onshore LNG project.

#### Please comment on the potential of the gas sector to transform the economy of Tanzania. Will Tanzania and Mozambique together emerge as one of the world's largest gas exporting regions?

East Africa clearly has the potential to become a major new gas producing province. For that to happen, the industry must be developed sustainably, for the benefit of all Tanzanians and the oil and gas companies, which will take on substantial risk by funding the infrastructure and facilities that will need to be built. Commercial terms and tax incentives must encourage investment, and longer-term fiscal stability is crucial.

As part of the potential project's assessment, we are doing detailed studies aimed at quantifying benefits to Tanzania as a whole. In general though, natural gas projects BG Group has done in other parts of the world have created many direct and indirect jobs during construction and generated significant tax revenues for the host governments, providing funds for both social and economic development.

The Tanzanian fields are large but will be expensive to develop, partly because the southern regions of the country lack basic infrastructure. Please comment on the viability of an LNG export terminal in southern Tanzania, the investment involved and when you envisage the plant could be operational.

You are correct. Developing offshore gas discoveries, particularly in deep water, requires large, sustained investment and is often technically challenging; having the resource is not enough –technically viable infrastructure to extract, process and transport the gas to market is also needed. We and our partners have much work to do before we can commit to spending the billions of dollars required on such a complex development.

But with acceptable commercial terms, a stable fiscal regime and willing buyers, we think we have an attractive opportunity.

Initial design work on an onshore gas plant and studies to assess the impact of any project on the environment, the economy and neighbouring communities will take us through to 2015 and 2016. This means the earliest we can take a decision on whether to proceed with the project will be after that period. Assuming four to five years for construction, this would see first gas production and exports early in the next decade.

#### Please describe how BG Group intends to work with its partners Statoil, Exxon Mobil and Ophir Energy and Pavilion to develop the terminal and the associated infrastructure.

Earlier this year, BG Group and its partners signed an agreement with Statoil and ExxonMobil setting out how we will collaborate on a potential joint LNG project. Under the agreement, BG Group is the lead developer during the phase known as pre-FEED, where we do the early work that allows us to move ahead to the actual engineering and design of the project.

We have established joint project offices in Dar es Salaam and London and assembled a dedicated, integrated project team comprising members of all the partners to work closely with the Tanzania Petroleum Development Corporation and the Ministry of Energy and Minerals.

#### The Tanzanian government has faced criticism in the past for the revision of its PSA terms. Please give an overview of BG Group's experience of working with the TPDC and Tanzania's Ministry of Energy and Minerals.

The Government of Tanzania, through its Ministry of Energy & Minerals as well as Tanzania Petroleum Development Corporation, has been successful in attracting and supporting international oil and gas companies, and that has led to these huge deepwater discoveries made in the last few years.

The next phase involves developing a fiscal and regulatory environment to support the LNG industry. LNG project development is capital intensive, involves onshore and marine operations and requires a complex set of commercial agreements, tax incentives and approvals that make the project feasible.

So, that's what is needed to support the industry. But I'm pleased to say that, while there is much work ahead, in our experience the government, the Ministry of Energy and Minerals and TPDC have been supportive and keen to make this new gas industry work for Tanzania.

#### Please outline BG Group's CSR activities in Tanzania, in particular the partnership with VETA and VSO to train young Tanzanians, and the scholarship scheme for Tanzanian postgraduates in the UK.

We are proud to partner the Government of Tanzania in a range of social investment initiatives. One of our key aims is to build the capacity of local communities to participate in Tanzania's new gas industry. We've tried to create an "education pipeline" where we help create a path for students to progress from post-primary education, to secondary education, and then onto industry relevant vocational, technical and higher education.

Here are a few examples:

Our Young Scientists Tanzania (YST) initiative provides a platform for young people from across the country to demonstrate their innovation and showcase their scientific talents.

In partnership with the Vocational Education Training Authority (VETA) and VSO, BG Group has delivered projects to strengthen training programmes for local people. Our VETA programme aims to give international-standard training courses in skills relevant to the oil and gas industry.

BG Tanzania, in partnership with the British Council, is offering scholarships to Tanzanian graduates to study MSc degrees in UK universities. The scholarships provide for both university and living costs in the UK. One of the great features of this program is that it promises to produce a cadre of Tanzanian graduates with internationally-recognised qualifications.

## What is your long-term vision for BG Group's relationship with Tanzania?

I want BG Tanzania to be seen as a company that did what it said it would do; a company that contributed meaningfully to economic and social development in Tanzania. It's not enough to have a gas plant as your legacy. I want BG Tanzania to be regarded as a Tanzanian business and be recognised as Tanzanian.

Secondly, as you know, natural gas has the lowest emissions of all fossil fuels. I would like BG Group to ensure that whatever development we do is good for people and the environment.

In 10 tens years' time, I expect that BG Group will be a leader in the country's new gas industry and that a talented Tanzanian will be sitting in my chair. We are working hard to give Tanzania the opportunity to one day provide customers around the world with large and reliable sources of natural gas

BG's Deepsea Metro 1 is currently drilling offshore Tanzania

